1. Record Nr. UNINA9910960525703321

Autore	Mazo Robert M
Titolo	Brownian motion : fluctuations, dynamics, and applications / / Robert M. Mazo
Pubbl/distr/stampa	Oxford, : Clarendon Press, 2002
ISBN	9786611998790 9781281998798 1281998796 9780191565083 0191565083 9780199556441 019955644X
Edizione	[1st ed.]
Descrizione fisica	1 online resource (302 p.)
Collana	Oxford science publications International series of monographs on physics ; ; 112
Disciplina	530.42 530.475
Soggetti	Brownian motion processes Markov processes Processos de moviment brownià Processos estocàstics Processos de Markov Mecànica estadística Difusió Polímers Fluctuacions (Física) Llibres electrònics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references (p. 271-284) and index.
Nota di contenuto	Contents; 1 Historical Background; 1.1 Robert Brown; 1.2 Between Brown and Einstein; 1.3 Albert Einstein; 1.4 Marian von Smoluchowski; 1.5 Molecular Reality; 1.6 The Scope of this Book; 2 Probability Theory; 2.1 Probability; 2.2 Conditional Probability and Independence; 2.3

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3.5 Some Special Processes3.6 Calculus of Stochastic Processes; 3.7 Fourier Analysis of Random Processes; 3.8 White Noise; 3.9 Conclusion; 4 Einstein-Smoluchowski Theory; 4.1 What is Brownian Motion?; 4.2 Smoluchowski's Theory; 4.3 Smoluchowski Theory Continued; 4.4 Einstein's Theory; 4.5 Diffusion Coefficient and Friction Constant; 4.6 The Langevin Theory; 5 Stochastic Differential Equations and Integrals; 5.1 The Langevin Equation Revisited; 5.2 Stochastic Differential Equations; 5.3 Which Rule Should Be Used?; 5.4 Some Examples; 6 Functional Integrals; 6.1 Functional Integrals
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Sommario/riassunto

Brownian motion- the incessant motion of small particles suspended in a fluid- is an important topic in statistical physics and physical chemistry. This book studies its origin in molecular scale fluctuations, its description in terms of random process theory and also in terms of statistical mechanics. - ;Brownian motion - the incessant motion of small particles suspended in a fluid - is an important topic in statistical physics and physical chemistry. This book studies its origin in molecular scale fluctuations, its description in terms of random process theory and also in terms of statistica